Chair via Blow Molding

Cross-Reference

The present application is a continuation-in-part application of US Patent Application Serial No. 10/425372.

Field of Invention

The present invention relates to a chair made via injection molding and, more particularly, to a chair made via blow molding.

Background of Invention

A typical chair includes a lower block and an upper block installed on the lower block. The lower block includes a base for installment on the ground, a telescopic post installed on the base, a control device connected with the telescopic post for control over the extending and shrinking of the telescopic post. The upper block includes a seat installed on the control device, a backrest installed on the seat and two armrests installed on the seat. The seat, the backrest and the armrests are separately molded and then assembled. This practice however requires a lot of labor and time and therefore entails a high cost.

US Patent Application Serial No. 10/425372 discloses a chair including a lower block and an upper block installed on the lower block. The upper block includes a seat, a backrest and two armrest formed together with one another via injection molding. The upper block is made of an

adequate size so as to provide a sufficient strength. An adequate size requires however a lot of material that entails a high cost in fabrication. Moreover, a lot of material results in a big weight that entails a high cost in transportation.

The present invention is therefore intended to obviate or at least alleviate the problems encountered in prior art.

Summary of Invention

It is an objective of the present invention to provide a chair that can easily be manufactured.

It is another objective of the present invention to provide a chair that can be manufactured at a low cost.

It is another objective of the present invention to provide a chair that is strong in structure and light in weight.

According to the present invention, a chair includes a lower block and a hollow upper block installed on the lower block. The hollow upper block includes a seat, a backrest and two armrests formed together with one another. The hollow upper block is made of an adequate size so as to be strong in structure. The hollow upper block requires only a little material so as to be light in weight.

Other objects, advantages, and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the attached drawings.

Brief Description of Drawings

The present invention will be described through detailed illustration of embodiments referring to the drawings.

Figure 1 is a perspective view of a chair according to a first embodiment the present invention.

Figure 2 is an exploded view of the chair of Figure 1.

Figure 3 is a cut-away view of the chair of Figure 1.

Figure 4 is a perspective view of a chair according to a second embodiment of the present invention.

Figure 5 is an exploded view of the chair of Figure 4.

Figure 6 is a perspective view of a chair according to a third embodiment of the present invention.

Detailed Description of Embodiments

Referring to Figures 1 through 3, according to a first embodiment of the

present invention, a chair 10 includes a lower block and an upper block installed on the lower block.

The lower block is conventional and includes a base 12 for installment on the ground, a telescopic post 14 installed on the base 12, a control device 16 connected with the telescopic post for control over the extending and shrinking of the telescopic post 14.

The upper block includes a seat 18 installed on the control device 16, a backrest 20 formed on the seat 18 and two armrests 22 integrated with both the seat 18 and the backrest 20. Some enforcement ribs 40 are formed on both the seat 18 and the backrest 20.

Referring to Figure 3, the upper block is hollow. Thus, a little material is required to make the upper block of an adequate size. An adequate size provides a sufficient strength. A little material entails a low cost in fabrication. A little material results in a small weight that entails a low cost in transportation.

To make the hollow upper block, injection molding is adopted, and blow molding is taken preferably. If a conventional process of injection molding is adopted, a mold and an insert are used. The mold and the insert are both made of at least one part. The insert is put in the mold. Molten plastic material is injected in a space defined via the mold and the insert. After being cured, the upper block is removed from the mold,

and the insert is removed from the upper block. Some apertures are inevitably left in the upper block due to removal of the insert from the upper block. Therefore, blow molding is taken preferably. Via blow molding, only a mold is needed without need of using an insert in the mold. Blow molding has been taken to make things and will not be further described in detail for being conventional. However, blow molding has never been made to make a chair.

Figures 4 and 5 show a chair according to a second embodiment of the present invention. The second embodiment is identical to the first embodiment except for including a lower backrest 24 and an upper backrest 26 instead of the single backrest 20. Like the backrest 20, the lower backrest 24 is formed on the seat 18. The lower backrest 24 includes a dovetail groove 28 defined in the top. The upper backrest 26 includes a dovetail 30 in the bottom. The dovetail 30 can be inserted in the dovetail groove 28, thus connecting the upper backrest 26 with the lower backrest 24. Adhesive is provided between the bottom of the upper backrest 26 and the top of the lower backrest 24, thus securing the upper backrest 26 to the lower backrest 24.

Figure 6 shows a chair according to a third embodiment of the present invention. The third embodiment is identical to the second first embodiment except for including an upper backrest 32 instead of the upper backrest 26. The upper backrest 32 is similar to the upper backrest 26 except for being taller.

The present invention has been described via detailed illustration of three embodiments. Those skilled in the art can derive variations from the embodiments without departing from the scope of the present invention. Therefore, the embodiments shall not limit the scope of the present invention defined in the claims.